

# Small Spacecraft Systems Virtual Institute

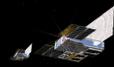


Thursday, March 25, 2021

Bruce D. Yost

*S3VI Director*

*[www.nasa.gov/smallsat-institute](http://www.nasa.gov/smallsat-institute)*



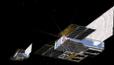
- Advance clear communications and coordination regarding small spacecraft activities across NASA.
- Provide the US smallsat research community with access to mission enabling information.
- Maintain engagement with small spacecraft stakeholders in industry, government and academia. Support the overall small spacecraft community.

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S3VI is a NASA-wide virtual institute managed at NASA Ames Research Center, with participation from HQ, LaRC, GSFC, JPL, MSFC, and GRC.

S3VI is jointly sponsored by NASA's Space Technology Mission Directorate (STMD) and the Science Mission Directorate (SMD).

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# S3VI Products and Support



## Strategic Communications, Coordination, and Outreach

S3VI Web Portal ([www.nasa.gov/smallsat-institute](http://www.nasa.gov/smallsat-institute))

### Small Spacecraft Virtual Institute

- Home
- Resources
- About S3VI
- NASA Launch Portal
- NASA Small Spacecraft Opportunities
- Space Mission Design Tools

Related Links

- Space Technology Mission Directorate
- Science Mission Directorate
- Small Spacecraft Technology Program
- CubeSat Launch Initiative
- Earth Science Technology Office
- Planetary Exploration Science Technology...
- Ames Small Satellite Portal
- Goddard CubeSats Program
- JPL CubeSat Portal

Related Topics

- All Topics A-Z

#### Recent SmallSat News

**Innovative Propulsion System Gets Ready to Help Study Moon Orbit for Artemis**

In 2021, NASA's Cis-lunar Autonomous Positioning System Technology Operations and Navigation Experiment, or CAPSTONE, CubeSat will launch to a never-before-used cislunar orbit near the Moon.

As a pathfinder for Gateway, a Moon-orbiting outpost that is part of NASA's Artemis program, CAPSTONE will help reduce the risk for future spacecraft by verifying the dynamics of a unique halo-shaped orbit. The mission will also demonstrate innovative spacecraft-to-spacecraft navigation technology and communications capabilities with Earth.

Archived SmallSat News

#### PI Launchpad: Developing Your First Flight Mission...

#### Released! 2020 Small Spacecraft Technology...

#### SmallSat/CubeSat Fleet Missions Database

The SmallSat/CubeSat Fleet Missions Database contains current status and details of NASA Science Mission Directorate, NASA Space Technology Mission Directorate, and NASA Human Exploration and Operations Mission Directorate sponsored missions. The database is offered as a downloadable file.

#### S3VI Information Search

NASA's Small Spacecraft Systems Virtual Institute's federated search capability serves as an entry point to the SmallSat Parts On Orbit Now (SPOON) database and other NASA-internal and external databases which allows the public to search multiple databases for small spacecraft parts, technologies, and other information.

PMPedia SPOON Techport NEPP

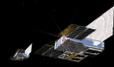
#### Community of Practice Webinar Series

#### NASA SBIR and STTR Program Solicitation 2021

#### Small Spacecraft Body of Knowledge

#### Working Groups and Initiatives

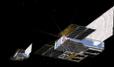
#### Upcoming Conferences and Events - COVID Impacts



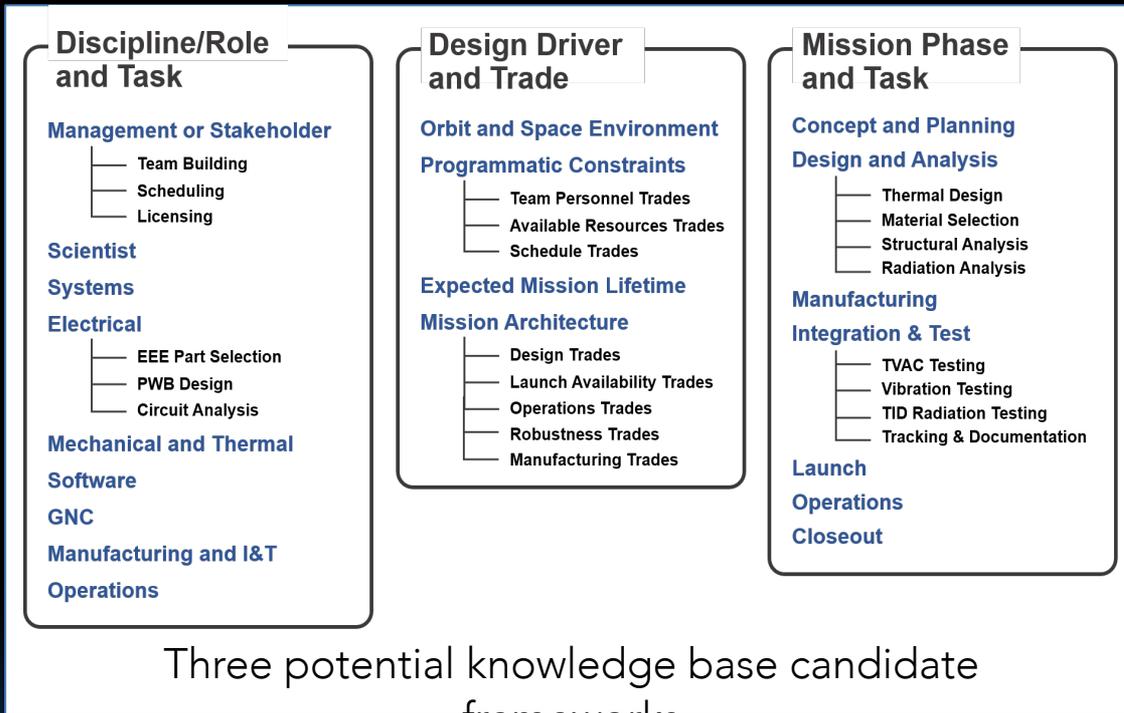
## S3VI Web Portal Elements – Public Facing

[www.nasa.gov/smallsat-institute](http://www.nasa.gov/smallsat-institute)

- NASA and OGA Solicitations
- Mission Design Tools
- SmallSat/CubeSat Fleet Missions Database
- Community of Practice Webinar Series
- Recent SmallSat News & Archive
- Small Satellite Reliability Initiative Working Group Archive
  - SSRI Knowledge Base Tool
- Upcoming Conferences and Events
- External SmallSat Community Links
- Small Spacecraft Technology State of the Art (SoA) report
- External Community Articles



## Small Spacecraft Body of Knowledge Small Spacecraft Reliability Initiative (SSRI) Knowledge Base



- The Knowledge Base is live and available to the public at: : <https://s3vi.ndc.nasa.gov/ssri-kb>

- Our goal with the knowledge base is to produce a “minimum viable product” that we can use to show productivity, start to have an impact on SmallSat efforts, and produce feedback that can be incorporated into further SSRI work.
- This can simply be a place to organize and provide downloads and references or link to existing high-quality resources on each topics.
- The SSRI Knowledge Base could be implemented in the existing S3VI Small Satellite Information database and made accessible via the search tool.



# Small Spacecraft Community of Practice Co-Sponsor with NEN

The screenshot displays the NASA Engineering Network (NEN) website interface. At the top, the NEN logo is accompanied by the text "NASA ENGINEERING NETWORK". Navigation links include "OCE", "Lessons Learned", "Communities", "Tools & Resources", and "Support". A search bar and a user profile icon are also present. The main content area is titled "SMALL SPACECRAFT" and features a "Community Home" sidebar. The central banner includes a "Join and Subscribe" button, a profile for Bruce Yost (Leads), and a "Community Support Facilitator" icon. A secondary banner promotes a "Community of Practice Webinar Series: Upcoming Webinars" with "View All News" and "Submit News Story" buttons. Below these are eight circular icons representing various community features: Anomalies, Ask an Expert, Conferences and Events, Contact List, Document Repository, Lessons Learned, Links, and Suggestions.

**NEN** NASA ENGINEERING NETWORK

OCE ▾ Lessons Learned ▾ Communities ▾ Tools & Resources ▾ Support ▾

SMALL SPACECRAFT

Community Home

Anomalies

Ask an Expert

Conferences and Events

Contact List

Document Repository

Lessons Learned

Links

Suggestions

## SMALL SPACECRAFT

The Small Spacecraft CoP will provide information resources, access to peer expertise, and opportunities for knowledge sharing and collaboration in sound management, engineering, manufacturing, and verification practices for development of small spacecraft projects including...  
View more

[Join and Subscribe](#)

**Bruce Yost**  
Leads

**Community Support Facilitator**

### Community of Practice Webinar Series: Upcoming Webinars

[View All News](#) [Submit News Story](#)

ANOMALIES

ASK AN EXPERT

CONFERENCES AND EVENTS

CONTACT LIST

DOCUMENT REPOSITORY

LESSONS LEARNED

LINKS

SUGGESTIONS